Results from STEM Council break-out sessions 12/9/14

Based on current programs and active committees, where are our gaps, opportunities, and the "next big thing" to aim toward?

DIVERSITY

How do we serve those schools that are underserved or have lower income students than others? Pull committee together that targets those schools under-represented, and discuss what programs are being offered, and how to communicate with them. Develop a resource list for them to go to if they can't/don't utilize STEM programming.

Committee on underrepresented populations – not race-based, but more socioeconomic.

STEM for all – we must be cognizant that we are touching all children and students.

Diversity in STEM, especially in Technology, from rural lowa. Incorporating cross groups of discussion on this.

Home schools – can we have more interaction with this group?

Make sure that every students knows what STEM is.

EARLY CHILDHOOD

How can we do more to target children at an even earlier age?

Focus on Pre-K. Formal endorsement from STEM Council on this matter.

Expand STEM discussion to PK-20. How do we begin teaching critical thinking skills at an early age?

SCALING UP

Scaling up "STEM things of success."

Broaden past scale-up programming (we've done it well, but time to think outside the realm of just this programming).

Great programs in place already – continue with fidelity of these programs.

BUSINESS PARTNERSHIP

Partnership – How to work even more effectively with Iowa Business Council and ABI to do more. Business Engagement. More of it and more detailed.

Businesses help send BOE through a lean process in becoming more nimble in teachers teaching across subject matter.

COMMUNICATION

Poster campaign – make them even more real time technical (i.e. QR codes). Day in the life experiences. Online experience in STEM, collected, with training on how you talk to various age groups of kids about STEM.

Significant web site redesign – including bilingual, with even more information.

Social media – Utilizing broadband to share more information.

Focus attention on critical areas such as rural broadband – make sure every student has internet access and a device.

CAREER COUNSELING

Counselors – Can we help them get more training on STEM, or even have specific career counselor in STEM in each region?

Counselors – getting them more experiences in STEM, with business, and get this information in front of students at an earlier age.

Counselor vs. social worker – school counselors turning in to a social service and not training kids for their future.

Positive role models for all children relating to STEM and promoting/reinforcing

Retirees – Utilize them to share career pathway information for those kids. Also how extern model can be developed more.

OUT-OF-SCHOOL

Informal education of STEM. Are there resources to be able to do more of this?

Instead of Mom's Night Out, expand to Family Night Out. Active Learning Committee has one planned for September 2015.

Engineering/STEM Competitions – Encourage families to work outside of the classroom in this effort, and have the Council support this with resources.

Unifying events – Having activities where all STEM students can come together in one event.

AWARDS

STEM Premier Student Rating – getting kids recognized. Linking with PLTW.

5-star, 4-star, kids can enter information.

Student STEM recognition/certification – better awareness.

Way to get kids involved, if they know they receive a rating.

Apply at colleges/industries.

Scholarship opportunities.

STEM PEDAGOGY

STEM Pedagogy – Desire in taking leadership role in moving even more development of this along.

Evaluation – Can we do more with this information?

Defining STEM certificate vs. endorsement. What does it mean to have.

Importance of STEM literacy for the non-STEM major.

Rating systems for students to showcase skills developed by STEM programs.

Systems problem – Embed a redevelopment of STEM education to fine tune the system of how STEM education is being delivered.

Redefine education system – get course credit for online courses. Better alignment with businesses. Telling kids that they are good at STEM.

CONFERENCING

Midwest STEM Forum – connect more, bring in Legislators from surrounding states. Get neighboring states engaged in some lowa programming, share with other states. Should we have a common STEM brand in the Midwest? Employees leaving after lowa winter; they're gone, Midwest message. Market to Chicago/Minneapolis/Detroit.